

**AMENDMENT TRANSMITTAL LETTER (Small Entity)**

Applicant(s): Gary O'Connor

Docket No.

7385-82593

Serial No.

10/037,507

Filing Date

07/04/2002

Examiner

Pak, Sung H.

Group Art Unit

2874

Invention:

COMMUNICATIONS ASSEMBLY DISABLING MECHANISM

**TO THE COMMISSIONER FOR PATENTS:**

Transmitted herewith is an amendment in the above-identified application.


- ☒ Small Entity status of this application has been established under 37 CFR 1.27 by a verified statement previously submitted.
- ☐ A verified statement to establish Small Entity status under 37 FR 1.27 is enclosed.

The fee has been calculated and is transmitted as shown below.

**CLAIMS AS AMENDED**

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	16 -	20 =	0 x	\$9.00	\$0.00
INDEP. CLAIMS	2 -	3 =	0 x	\$43.00	\$0.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00

- ☒ No additional fee is required for amendment.
- ☐ Please charge Deposit Account No. \_\_\_\_\_ in the amount of \_\_\_\_\_
- ☐ A check in the amount of \_\_\_\_\_ to cover the filing fee is enclosed.
- ☒ The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 23-0920
- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
- ☐ Any patent application processing fees under 37 CFR 1.17.

  
Jon P. Christensen  
Reg. No. 34,137

Dated: October 16, 2003

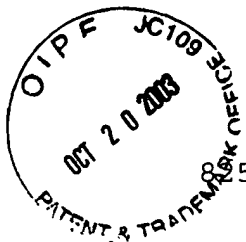
I certify that this document and fee is being deposited on 10/16/2003 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Signature of Person Mailing Correspondence

Abby Boone

Typed or Printed Name of Person Mailing Correspondence

CC:



82593

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary O'Connor Art Unit: 2874  
Serial No.: 10/037,507  
Filed: January 4, 2002  
For: COMMUNICATION ASSEMBLY  
DISABLING MECHANISM  
Attorney  
Docket No.: 82593

RECEIVED  
OCT 23 2003  
TECHNOLOGY CENTER 2800

AMENDMENT A

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the Office Action of July 21, 2003,  
please amend the above-identified application as follows:

REMARKS

1. Reconsideration and further prosecution of the above-identified application are respectfully requested in view of the amendments and discussion that follows. Claims 1-16 are pending in this application. Claims 1-6 and 9-14 have been rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. Pub. No. US 2003/0103735 to Anderson et al. Claims 7-8 and 15-16 have been objected to as being dependent upon a rejected base claim, but allowable if

rewritten in independent form. After a careful review of the specification and claims, it has been concluded that the restrictions are in error and the restrictions are, therefore, traversed.

2. Claims 1-6 and 9-14 have been rejected as being obvious over Anderson et al. In particular, the Examiner asserts that

"Anderson et al reference discloses an optical device with all the limitations set forth in the claims, except it does not teach the axis of transmission from an optical source being perpendicular to the axis of plug insertion. Never the less, Anderson et al reference does disclose: optical plug and receptacle (Fig. 2); disposing an optical source and a receiver on a side wall of the receptacle with the axis of transmission from the optical source to the receiver directed into and across a plug space (Fig. 3A); interlocking the connection between the plug and the optical source when the detector received the signal form the optical source (Fig. 4, Abstract); the optical source being a light emitting diode, and the receiver being a photodiode.

However, disposing the optical sources and receivers such that the axis of transmission from the optical source is perpendicular to the plug insertion axis, is well known and commonly used in the optical module art. Such an arrangement allows for better optical alignment between the optical source and the fiber connectors with the use of alignment lens or mirrors. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Anderson et al. device to have optical source and receiver disposed such that their axis of transmission is perpendicular to the axis of plug insertion."

It is noted first that Anderson et al. is drawn to the use of ferrules 114 instead of plugs and receptacles. The fact that Anderson et al. does not use plugs and receptacles is demonstrated by the fact that the ferrule 114 is mounted on top of an array of optoelectronic devices 106 with a first adhesive 116 (Anderson et al., par. 0050). In addition, "To further mechanically stabilize the first ferrule 112 to the flexible printed circuit board 102, a dam 120 may be formed on the flexible printed circuit board 102 and filled with a second adhesive 122" (Anderson et al., par 0051). As would be clear to those of skill in the art, if Anderson et al. used plugs and receptacles, adhesives would not be required (or even described).

It is noted next that Anderson et al. is directed to "the precise axial alignment between the array of optical fibers 114 and array of optoelectronic devices 106" (Anderson et al., par 0050). Since Anderson et al. uses ferrules 112 and not receptacles and since the optoelectronic devices 106 are precisely aligned with optical fiber 114, there is no "optical source and receiver in a sidewall of the receptacle with an axis of transmission from the optical source to the receiver" (claim 1, lines 3-4).

It is noted next that the Examiner asserts that "disposing the optical sources and receivers such that the axis of transmission from the optical source is perpendicular to the plug insertion axis, is well known and commonly used in the optical module art". The applicant respectfully traverses this assertion. Optical connectors transmit optical signals parallel to a plug insertion axis because optical fibers are known to break when bent sharply. Absent a recognition of the problem solved by the

claimed invention, a person of skill in the art would not dispose an optical source perpendicular to an axis of transmission without having some precise objective in mind. If the Examiner believes that such knowledge is well known in the art, then it is respectfully requested that the Examiner provide a reference providing the factual basis for such assertion as required by 37 CFR §1.104(c)(2). If the Examiner is relying upon his own personal knowledge, then an affidavit is respectfully requested from the Examiner as required by 37 CFR §1.104(d)(2).

The Examiner asserts that Anderson et al. teaches of the use of an optical interlock. The applicant respectfully traverses this assertion. Since the Anderson et al. ferrule 112 is glued to the optoelectronic device 106, there would be no reason for an optical interlock, because the adhesive 116, 122 would prevent disassembly. If the Examiner believes that such knowledge is known or descibed in the art, then it is respectfully requested that the Examiner provide a reference providing the factual basis for such assertion as required by 37 CFR §1.104(c)(2). If the Examiner is relying upon his own personal knowledge, then an affidavit is respectfully requested from the Examiner as required by 37 CFR §1.104(d)(2).



Allowance of claims 1-16, as now presented, is believed to be in order and such action is earnestly solicited. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, he is respectfully requested to telephone applicant's undersigned attorney.

Respectfully submitted,  
WELSH & KATZ, LTD.

By 

Jon P. Christensen  
Registration No. 34,137

October 16, 2003  
WELSH & KATZ, LTD.  
120 South Riverside Plaza  
22nd Floor  
Chicago, Illinois 60606  
(312) 655-1500

RECEIVED  
OCT 23 2003  
TECHNOLOGY CENTER 2800